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ABSTRACT

A study examined the effects of technological change on news production, particularly the introduction of an electronic press release service (as opposed to the mailing of paper copy news releases) to two newspapers in Madison, Wisconsin in late 1984. A content analysis of 309 news releases generated at the University of Wisconsin's news service was conducted during March and April 1984 (before electronic transmittal began) and again during March and April of 1985. Results showed that only four of nine news value attributes significantly predicted news release publication, but the specific mention of uniqueness in a release decreased the likelihood of publication. The percentage of timely news stories increased, and the proportion of news releases used increased, though not significantly. But, contrary to expectations, the average word length of news service stories increased. The major findings of this study were that electronically transmitted stories selected by the newspaper received less substantive editing than did stories selected under the traditional "hard copy" system, and that the reduction in substantive editing was most pronounced for stories low in news value. Although several hypotheses were rejected, the overall thrust of the study appears to support the suggestion that structural change in story delivery results in the modification of the journalist's behavior. (Tables of findings are included.) (SRT)

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THE EFFECT OF "ELECTRONIC" NEWS SOURCES ON NEWS PRODUCTION

by

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CS 209 818

THE EFFECT OF "ELECTRONIC" PRESS RELEASES ON NEWS PRODUCTION*

Introduction

Since its inception journalism has been a technology-driven business. And with each technological innovation, both scholars and news professionals have pondered how the change will affect news production.[1]

Most recently, the concern has focused on how the introduction of computerized newsrooms will affect the selection and editing of news. Do VDTs make writing easier? Reporters say they do. Do VDTs make editing easier? Copy desk editors claim they do.[2]

But little systematic research has examined the effects of technological change on news production. In this paper we attempt to add to that sparse literature by examining the introduction of an electronic press release service to two newspapers and by suggesting some theoretical reasons why we would expect a shift from "hard" press releases to "electronic" ones to result in changes in behavior on the part of both source and the media.

The locus of our study: In late 1984 the University of Wisconsin News Service shifted from a policy of mailing printed news releases to two local daily newspapers to transmitting the same information electronically. Under the traditional hard copy system, the newspapers would receive press releases by mail, editors would make decisions about whether to attend to or ignore

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* We wish to acknowledge graduate students Jane Beyer, Rashmi Luthra, and Jean-Luc Mathieu for their contributions to this study during the conceptualization process and the coding of data.

them, and those destined for publication would then be manually keyed into the newspapers' computer system by a reporter or a clerk. With the advent of electronic transmission in November 1984, the stories were sent via telephone linkage directly to the newpapers' computer system. Editors would then call up either a daily directory or the stories themselves on a screen, make story selections, and then direct stories to appropriate reporters. Reporters no longer were responsible for manually keying in stories but could edit and revise on the screen as appropriate.

Our interests in this technological shift were both practical and theoretical. From a practical standpoint, we were seeing a development that will soon become common in newsrooms: electronic delivery of press releases.[3] Anyone in the journalism business would thus be interested in tracking changes wrought by such a shift. And we were in an excellent position to record any changes; we had access to news service output and to newspaper products both before and after the introduction of the electronic transmission service (called U*Wire).

But perhaps just as important were our questions about <u>why</u> these changes might take place. And those questions led us on a search for a theoretical base or two from which to generate hypotheses.

Theoretical Context and Hypotheses

One standard predictor of news selection has been the content-free news value. Over the years scholars have demonstrated--using content analysis or quasi-experimental settings-- that such values such as timeliness, prominence, magnitude of an event, relevance to readers, presence of conflict, etc., are associated with information selection by reporters and editors.[4]

We felt it important to take such predictors into account in this study. So we hypothesized:

H_1: Each news content variable employed in this study will be positively associated with the probablity of story publication.

Galtung and Ruge, in their seminal study of the coverage of foreign news in newspapers, also argued that news values were "additive," that is, that news stories with more news values would be considered by journalists to be of higher worth than news stories with fewer news values. A story about a prominent individual would be considered less newsworthy under this hypothesis than would a story about a prominent individual that also contained conflict.[5] This led us to posit:

H_2: Increased news value (operationalized as an additive news value index) will be positively associated with the probability of a news story being published.

But, although we would have to take news values into account, our real interest in this study was in looking at changes in the news generation behaviors of the news service and in the news selection and editng behaviors of the newspapers that could be associated with the introduction of the U*Wire.

We found little literature that could provide a predictive base for hypothesizing changes in source behavior. One study of editors at an electronic news service found them engaged in a struggle to maintain the style and substance of newspapers while attaining the brevity of radio.[6] Substance lost out in that contest; the researchers found story shortening to result in the loss of direct quotation, description and the general context in which the event took place.

Similarly, in his study of electronic "newspapers" in Great Britain and Europe, Weaver found that British and Dutch videotex and teletext electronic news services transmitted very brief items to avoid tedious searches of elaborate menus and irritating jumps to additional pages, or screens.[7]

So we posited a similar "shortening" trend between stories before U*Wire was introduced (Time 1) and stories after U*Wire (Time 2):

H_3: Across time, the average length of news stories generated by the University News Service will decline.

With the installation of U*Wire, it became possible for the news service to transmit stories that were "immediate," that is, fast-breaking stories that would not have been possible under the old system with its attendant time delays. Thus, one would expect to see a shift in story attributes to reflect this structural possibility:

H_4: Across time, the proportion of timely news stories generated by the news service will increase.

But what would about the behavior of the newspapers? We found two competing--but not necessarily exclusive--theoretical traditions that would predict to changes in reporter behaviors based on the introduction of U*Wire.

One is the marketing concept of low involvement. Without going extensively into the involvement literature, suffice it to say here that we define involvement, as suggested by Rothschild, as a state of motivation, arousal, or interest that can be driven by a variety of variables.[8] One of those variables, we argue, is physical interaction with an object. When interaction is required, one should find a higher level of involvement with an object than when interaction is not required. And we find differential levels of interaction requirements when we compare reporter encounters with news service stories at Time 1 with those at Time 2. At Time 1, before U*Wire, reporters had to literally type selected news releases into the newpapers' computer systems; they were forced to interact with the information at a physical level, at the very least. This changed dramatically at Time 2. Stories now came readily to reporters' VDT

screens; no manual labor was required to put them into the system. Thus, level of involvement should be higher at Time 1 than at Time 2.

Lower levels of involvement at Time 2 should mean two things. One is that stories available to the newspapers that don't require expensive reporter labor should be more readily used. So we hypothesized:

H_5: The proportion of news service stories published by the two Madison newspapers will increase across time.

And secondly, lower levels of involvement also suggest that reporters will tamper less with the stories that are selected. That is, if they don't have to involve themselves in typing stories into the system, they are less likely to edit the stories as well. So we posited:

H_6: Editing of news service stories will decrease over time.

One would also come up with this last hypothesis on the basis of the second theoretical tradition, an entirely different literature that examines the ease with which individuals can critically read and revise electronic texts. Composition theorists who experimentally test for differences between reading or editing hard copy and electronic copy find that "making sense" of a text is more difficult when one examines it on a computer screen than if one examines it in printed form.[9] Thus, one might expect reporters to avoid extensive editing of electronic texts because their meanings are harder to grasp. Indeed, the few studies of VDT editing by journalists and journalism students suggests either no difference in time or accuracy of editing between electronic or hard copy [10] or differences in the direction predicted by composition theorists: editing electronic copy takes longer and results in more errors.[11]

Finally, taking news values into account suggests differential treatment of more and less newsworthy stories at Time 2. We felt that, if the news value of a story constitutes an index of

the importance a reporter assigns to a story, then stories with high news value may get more attention from a reporter. Under this scenario, one might expect reporters at Time 2 to edit low news value stories only when necessary but to give high news value stories as much attention as they merit. So we hypothesized:

H_7: Under conditions of low news value, the amount of editing will decline across time.

H_8: Under conditions of high news value, the amount of editing will remain constant across time.

Methods

This study was formulated in the spring of 1985 by members of a graduate seminar in the School of Journalism and Mass Communication at the University of Wisconsin-Madison. We conducted a content analysis of news releases generated at the University News Service during March and April 1984 and 1985 and of the stories published from these releases by the two daily Madison newspapers. This design allowed analysis of content before and after the news service upgraded its means of transmitting stories to the Madison newspapers in late 1984.

In November 1984, the news service installed "U*Wire," an electronic news wire. Through U*Wire, stories are sent directly from the news service's VDT system, via telephone line, to the recipient's VDT system. Stories are sent twice daily to accommodate both the AM and PM news cycles. On a typical day, the new service sends up to five stories to the Madison newspapers. The main advantage of U*Wire is that news copy can now be transmitted in a matter of minutes; prior to the installation of U*Wire the news service was reliant on the U. S. postal service, with at least a 24-hour turnover time.

The function of the news service is to "disseminate news about campus, research,

administrative things, student life to general public through the news media, and also to serve as a representative of campus to the media," according to the assignment editor at the news service. Therefore, stories written by the news service staff range from straight news items to features. Although the local Madison newspapers are the primary consumers of news service copy, stories are also sent to the Madison broadcast media, dailies throughout Wisconsin, and to major media markets, including Chicago and New York.

In addition to the content analysis of news releases and published stories, interviews were conducted with the director, managing editor and assignment editor of the news service, and with the city editors and higher education reporters of the Madison newspapers.[12] These interviews served two purposes. They supplied background information about the news production practices of the news service and the newspapers. And also, they also would help us to identify any competing explanations for the changes at Times 1 and 2 that we hypothesized.

A total of 309 news releases were written by the news service staff during March and April 1984 and 1985, all of which were included in our sample. These releases were matched with stories published by the Madison papers, as found in archives (March-June 1984 and 1985) maintained by the news service.[13] Published stories were included in the study only if they were clearly based on a news service release from the two-month period. Stories were included regardless of whether they were published verbatim or had been rewritten at the newspaper. However, stories that seemingly utilized the release only as a news "tip" were not included.[14] The March-April period was selected after consultation with news service personnel. These two months contain few holidays or other aberrant events that would affect news flow, and we estimated the two months of each year would generate enough stories for analysis.

Our study centered on factors associated with news service stories published by the

Madison newspapers and changes in these factors across time. Our primary independent variables were (1) attributes of story content and (2) the mode of story transmission. The primary dependent variables were (1) the publication status of news service releases, (2) news service output and (3) the amount of editing of releases prior to publication.

Story content was measured by variables reflective of news value. These news values included degree of timeliness, amount of money mentioned, number of persons mentioned, presence of conflict, the prominence of the news source(s) and his/her organizational affiliation, and story topic uniqueness. Full definitions of all of our variables can be found in Appendix 1.

The mode of story transmission was the U. S. postal service in 1984 (Time 1) and the U*Wire in 1985 (Time 2).

The publication status of news service releases was determined by whether or not a story from a press release that had been published in either or both newspapers appeared in the news service archives during the months March-June 1984 and 1985. We assumed that if a release was not published within a two-month period after it was sent to the newspapers, it was not likely to be published at all.

We measured news service output in terms of timeliness and story length. Story length included measurement of the length of the news release (number of words) and of the published story (number of column inches).

Editing of news service copy done at the newspapers at Time 1 and Time 2 was indexed by counting mechanistic changes such as spelling and punctuation, as well as substantive changes. Substantive changes included changes in meaning or sources, and the introduction of extensive amounts of new information. Extreme substantive editing would involve a total story rewrite.

To test the reliability of our coding scheme, six coders coded 15 news releases randomly selected from our sample of 309. Of the news releases coded, ten stories were published by the

Madison newspapers. A Scotts pi coefficient was calculated for categorical variables in order to control for chance.[15] The reliability ranged from .64 to 1.00, with a mean reliability coefficient of .88 and a standard deviation of .08.[16]

Results

The distribution of news stories was evenly distributed across both of the time periods of the study (See TABLE 1). Nearly two-fifths (37%) of the news releases received by the newspapers were published in some form. About one-third (31%) of these published releases were almost entirely rewritten before publication, while the remainder were modified to a lesser extent, if at all. Slightly more than four-fifths (83%) of the published stories were printed in the market-dominant morning newspaper.

Hypothesis 1. The proposition that news stories containing journalistically valued attributes would be more often published received only mixed support (see TABLE 2). Of nine news value attributes tested, only specific mention of a dollar amount, the number of persons involved in the event, and the prominence of the group with which a source was affiliated were associated with a greater probability of publication. Interestingly, the overt mention of the unique aspect of a news story appeared to lessen its chances of publication; this counterhypothetical finding is nearly significant at p=.06.

Hypothesis 2. We created an additive scale made up of eight dichotomized new value attributes as an index of news value.[17] The news value index is weakly (r=.20) but significantly correlated with the likelihood that a story will be published. Comparing the number of attributes with the percentage of stories published reveals that the relationship is not linear, however, and is perhaps best described as a step function (See FIGURE 1).

Hypotheses 3-5. As expected, the percentage of timely news stories issued by the news

service increased over time (see TABLE 3). But, contrary to the fourth hypothesis, the average word length of news service stories increased during the second time period. The proportion of news releases used by the newspapers studied showed a slight but not significant increase from 35% to 40% between Time 1 and Time 2. This was in the direction suggested by hypothesis 5.

Hypothesis 6. Indices of substantive story editing[18] and mechanistic editing[19] were used to test for the hypothesized decrease in editing changes over time. As shown in TABLE 4, both substantive and mechanistic editing changes by journalists decreased over time. However, only the former is statistically significant.

But does time remain a significant predictor of editing changes after other variables are controlled? An examination of across-time differences for the published stories only indicates that, of the news value attributes in the analysis, conflict, the additive news value index and story length (in words) differed significantly from Time 1 to Time 2. A regression model in which the time period variable was entered as a final step showed that time remained a strong predictor of substantive editing changes but failed to hold up as a predictor of mechanistic editing changes when controlling for conflict, news value and story length (See TABLE 5). The additive news value index accounted for significant amounts of variance in the substantive editing equation, while both news value and length of story were significant predictors of mechanistic changes. For the mechanistic editing model, as the news value and length of stories increased, so did the amount of editing done at the newspapers.

Hypotheses 7 & 8. Mixed results were found for the final two hypotheses, in which the published stories were divided into high and low news value groups (See TABLE 6). As predicted, substantive editing of low news value stories declined across time (beta=-.33). However, contrary to expectation, low news value mechanistic editing changes remained essentially unchanged (beta=-.07) while both substantive (beta=-.22) and mechanistic (beta=-.23)

editing of high news value stories declined across time, although neither beta is statistically significant. Interestingly, story length accounts for essentially all of the variance in the low news value mechanistic equation.

A perusal of FIGURE 2 demonstrates that substantive editing for both high and low news value stories and mechanistic editing for high news value stories decline sharply from Time 1 to Time 2.

Discussion

Although several of our hypotheses were rejected in the particular, the overall thrust of the study appears to support the suggestion that structural change in story delivery results in the modification of journalists' behavior.

An unexpected result in the analysis was the finding that only four of nine news value attributes significantly predicted news release publication. Indeed, regressing story publication onto all nine predictors accounts for only eight percent of the possible variance. Given the relatively high level of intercoder reliability, this suggests that the strategy of using content-free attributes of news value to predict publication is of limited worth. An approach taking into account these attributes, plus the utility functions of the decision-making journalists, and possible situational constraints (eg., newshole, range of competing stories) would likely be more fruitful.

The anomalous finding that the specific mention of uniqueness in a release leads to a lesser likelihood of publication may be explained by the argument that journalists may discount stories whose subjects are overtly touted as "one of a kind" or unique.

The Galtung and Ruge additivity hypothesis did not receive major support. The data more readily support a step-function interpretation. Certainly, though, this study cannot be

considered definitive; examining the combination of several content categories would reveal more exactly the nature of any non-linear patterns.

The increase in story length between Times 1 and 2 also merits comment. The changeover to the computerized system by the news service was accompanied by a simultaneous switch in that office to the use of word processors. And research findings show that writers tend to produce more copy when using word processors than when working with hard copy.[20] This may at least partly explain why the news service staff was producing longer stories at Time 2.

Still, the major finding of this study is that stories selected by the newspaper after the introduction of U*Wire received less substantive editing than did stories selected under the traditional "hard copy" system and that the reduction in substantive editing was most pronounced for stories low in news value. Less editing is consistent with both the suggestion that a low-involvement situation would make reporters less likely to tamper with news service stories and with the composition theorists' argument that electronic editing of text is more difficult than "paper" editing.

More generally, if this technological change in information dissemination to newspapers indeed results in less substantive editing by reporters, then this suggests that electronic dissemination increases the source's ability to maintain control over its information. And as we see a variety of sources moving to electronic dissemination, this may presage increasing control by sources over the production of information.

On the other hand, if composition theorists are correct in their arguments that text on an electronic screen is more difficult to grasp than is hard copy text, then reporters opting for less editing might be a good strategy if accuracy is a high priority. As Flower et al. note, if there is a direct connection between the meaning people get from reading a text and the coherence of their revision of that text, then "the accuracy of such reading could have a large effect on their ability

to evaluate and revise."[21] In other words, if a reporter gets the wrong meaning from a story, he or she will do a shoddy job of editing it, particularly when it comes to making substantive changes. Better, perhaps, to leave it alone.

Several modifications in the design of future studies suggest themselves. The present study makes no allowance for comparisons between sources. As more sources switch to a computerized information feed to deliver releases, one might expect to find journalists exhibiting varied editing patterns depending on perceptions of source credibility, accuracy and the like. Additionally, as journalists become more accustomed to electronic feed, we might expect to see either increasing divergence or similarity in the ways electronic text and hard copy are edited.

There may also be differences across and within media. An example of the former might include differences in editorial treatment of press releases between television and print media, or between newspapers and wire services. The latter approach might be based on differing media roles in a community as suggested by Tichenor et al. For example, whether a newspaper is guided by a "community consensus" or a "watchdog" philosophy could produce marked differences in the amount of editing performed.[22]

Finally, although we have argued that less editing is an indicator of increased source control, it must be acknowledged that no baseline establishing absolute source control exists; comparisons are relative and differences are of a degree. The data suggest that subsidized[23] electronic transfer of information results in less editing. This leaves open the question of whether this represents a significant increase in source control, or a minor increment in control that sources may have long exercised.

FOOTNOTES

[1]Types of technology that produced dramatic changes in news products include the introduction of mass printing capabilities, the telegraph and the typewriter, all during the 19th century. By the middle of the 20th century, mass communication scholars had begun to attend to technological change. See, for example, a series of articles that examined the introduction of teletypesetters in the 1940s and 1950s: Robert J. Cranford, "Effects of the Teletypesetter Upon Newspaper Practices," Journalism Quarterly 29:181-186, Spring 1952; Scott M. Cutlip, "Content and Flow of AP News--From Trunk to TTS Reader," Journalism Quarterly 31:434-446, Fall 1954; Robert L. Jones, Verling C. Troldahl and J.K. Hvistendahl, "News Selection Patterns from a State TTS-Wire," Journalism Quarterly 38:303-312, Summer 1961.

[2]Most material on the use of VDTs in newsrooms deals with reporters' and editors' perceptions of the technology's effects on their work. See, for example, Bruce Garrison, "Electronic Editing Systems and Their Impact on News Decision Making," Newspaper Research Journal 3:43-53, January 1982. This study does bolster self report with observation and content analysis.

[3]The University News Service is by no means either the first organization to disseminate stories to media electronically or the first academic organization to do so. The PR Newswire began electronic dissemination of press releases in Chicago as early as 1954, and the University of Nebraska was one of the first universities to do so, inaugurating an electronic service in the late 1970s. For a brief discussion of the emergence of these electronic dissemination systems, see Scott M. Cutlip, Allen H. Center and Glen M. Broom, Effective Public Relations, 6th ed. (Englewood Cliffs, NJ: Prentice-hall, 1985) pp. 368-370.

[4]See, for example, James K. Buckalew, "News Elements and Selection by Television News Editors," Journal of Broadcasting 14:47-53, Winter, 1969-1970; L. Erwin Atwood, "How Newsmen and Readers Perceive Each Others' Story Preferences," Journalism Quarterly 47:296-302, Summer 1970; and Mervin D. Lynch, Hazel M. Nettleship and Richard P. Carlson, "The Measurement of Human Interest," Journalism Quarterly 45:226-234, 1968.

[5]Johan Galtung and Mari Holmboe Ruge, "The Structure of Foreign News," Journal of International Peace Research 1:64-90, 1965.

[6]James S. Ettema and William F. Griswold Jr., "Notes on an Electronic Newspaper," paper presented to AEJMC convention, Gainesville, FL, 1984.

[7]David H. Weaver, Videotex Journalism (Hillsdale, NJ: Lawrence Erlbaum, 1983).

[8]Michael L. Rothschild, "Perspectives on Involvement: Current Problems and Future Directions," in Kinnear, ed., Advances in Consumer Research, vol. 2 (Ann Arbor: Association for Consumer Research, 1984) pp. 216-217.

[9]See, for example, Christina Haas and John R. Hayes, "What Did I Just Say? Reading Problems in Writing with the Machine," Research in the Teaching of English 20:22-35, February 1986.

[10]Linda J. Shipley and James K. Gentry, "How Electronic Editing Equipment Affects Editing Performance," Journalism Quarterly 58:371-374, 387, Autumn 1981.

[11]James A. Crook, "How the New Technology Affects Student Editing," Journalism Educator 31:12-15, 46, January 1977; and Roger Bennett, Randall L. Murray and Guido H. Stempel III, "Editing Accuracy Drops with VDTs, Ohio Study Shows," Journalism Educator 32:11-12, July, 1977.

[12]Newspaper #1, a morning paper, is the dominant daily in the Madison market, and has circulations of 77,373 (Mon-Fri), 76,335 (Sat) and 141,259 (Sun). Newspaper #2, the

afternoon paper, is published Monday through Saturday, and has circulations of 29,189 (Mon-fri) and 28,629 (Sat).

[13]The news service maintains clip sheets for all university-related news published in dailies throughout Wisconsin, as well as nationally circulated papers such as The New York Times, Wall Streeet Journal and Christian Science Monitor.

[14]To check the ability of the university clipping service to find university-related stories in the two Madison newspapers, we compared stories in a two-week sample of the newspapers (two weeks during May 1985) with those appearing in the clip sheets. Of the 95 university-related stories in the newspapers, 14 were missed by the clipping service. However, only three of the 14 had originated from news service releases. This indicated that, for the two-week period, the clipping service had found the vast majority of press release-based stories. We thus concluded that the stories in the clip sheets fairly represented those based on press releases and published in the two target newspapers.

[15]Scotts pi = $\frac{\% \text{ correct} - \% \text{ chance}}{1 - \% \text{ chance}}$

[16]The relatively low intercoder reliability for the variable column inches (.64) was a unique case caused by inconsistent rounding procedures among coders. The problem was resolved by clarifying rounding procedures, and all coders recalculated.

[17]Timeliness was dropped from the index of news attributes because it was negatively correlated with other attributes and decreased the reliability of the scale. The remaining items produced a Cronbach's alpha of .63.

[18] The substantive editing index was formed as an additive scale ranging from 0 to 47, mean = 6.219, Sd=7.424, alpha=.72, and was composed of the following items: Lead sentence meaning change (as indexed by the absolute value difference of the number of words changed in

the lead of story sent and as published), number of paragraphs eliminated, major rewrite status, number of sources deleted, number of sources added, addition of new information, and addition of conflict to a news story.

[19]The mechanistic editing index was formed as an additive scale ranging from 0 to 48, mean=8.013, Sd=9.361, alpha=.70, and was composed of the following items: number of single word changes, number of small (2-3) word changes, number of phrase changes, number of complete sentence changes, number of punctuation changes and number of mechanistic changes (See APPENDIX 1).

[20]J. Gould, "Composing Letters with Computer-Based Text Editors," Human Factors 23: 593-606, 1981.

[21]Linda Flower, John R. Hayes, Linda Carey, Karen Shriver and James Stratman, "Detection, Diagnosis, and the strategies of Revision," College Composition and Communication 37: 16-55, February 1986.

[22]P.J. Tichenor, G.A. Donohew, and C.N. Olien, Community Conflict and the Press, Beverly Hills: Sage Publications, 1980.

[23]O.H. Gandy Jr., Beyond Agenda Setting: Information Subsidies and Public Policy, Norwood, N.J.: Ablex, 1982.

TABLE 1. Distribution of News Stories in Study

Distribution By:

Time of Publication

Time 1	51.1%
Time 2	48.9%
(n)	(309)

Publication Status

Published	37.5%
Not Published	62.5%
(n)	(309)

Newspaper

Newspaper #1	82.8%
Newspaper #2	17.2%
(n)	(116)

Rewrite Status

Rewritten	31.2%
Some editing	69.8%
(n)	(116)

TABLE 2. Percentages[1] of Published/Unpublished Stories Containing News Story Attributes

Story Attribute	Published (116)	Not Published (193)
High Timeliness[2]	58.6%	62.7%
Mention of:		
Dollar Amount*	32.8%	17.6%
Conflict	15.9%	14.5%
No. of Persons Involved*	31.0%	19.2%
1st Source Prominent	42.2%	43.0%
2nd Source Prominent	15.5%	12.4%
1st Source Group Affiliation Prominent*	45.7%	30.6%
2nd Source Group Affiliation Prominent*	15.5%	6.7%
Uniqueness	6.0%	13.0%

*p<.05

[1] Percentages total greater than 100% down the columns because any one story could contain more than one attribute.

[2] The timeliness variable was dichotomized into high and low timeliness. High timeliness refers to stories that would lose their value after two weeks.

TABLE 3. Mean Timeliness, Story Length and Stories Used by Time of Publication

Variable	Time 1	Time 2	t	Sig.(one-tailed)
Timeliness[a]	.563	.662	-1.79	.04
Story Length (# of words)	239.070	283.133	-1.74	.04
Proportion of Stories Used[a]	.348	.404	-1.01	.156 (ns)
(n)	(158)	(151)		

[a]Mean Percentage

TABLE 4. Mean Substantive and Mechanistic News Story Editing by Time Period

Variable	Time 1	Time 2	t	Sig.(one-tailed)
Substantive (n=112)	11.337	6.729	2.62	.005
Mechanistic (n=78)	9.533	7.063	1.14	.130 (ns)

TABLE 5. Regression of Substantive and Mechanistic Transformation Indices on Conflict, Newsvalue, Total Number of Words and Time Period

Substantive Editing Index (n=111)

	B	Standardized Beta	R^2 Chg.	Sig. Chg.
Conflict	1.441	.054	.005	.468
News Value	.841	.152	.055	.014
Total Words	.008	.184	.023	.106
Time Period	-5.250	-.273	.071	.004
(Constant)	(12.766)			
Mult R = .392	R^2 = .154			

Mechanistic Editing Index (n=77)

	B	Standardized Beta	R^2 Chg.	Sig. Chg.
Conflict	-5.287	-.172	.013	.323
News Value	.032	.006	.064	.027
Total Words	.024	.531	.204	.001
Time Period	-2.662	-.139	.018	.182
(Constant)	(6.989)			
Mult R = .546	R^2 = .298			

TABLE 6. Regression of Substantive and Mechanistic Editing Indices on Conflict, Total Words, and Time Period by News Value

Substantive Editing Index

	Low News Value (n=71)				High News Value (n=41)			
	B	Standardized Beta	R^2 Chg.	Sig Chg.	B	Standardized Beta	R^2 Chg.	Sig Chg.
Conflict	.766	.025	.001	.867	2.692	.109	.007	.609
Total Words	.008	.179	.033	.132	.016	.267	.054	.146
Time Period	-5.610	-.333	.110	.005	-4.831	-.218	.040	.206
(Constant)	(14.702)				(11.604)			
	Mult R=.379 R^2=.143				Mult R=.318 R^2=.101			

Mechanistic Editing Index

	Low News Value (n=50)				High News Value (n=24)			
	B	Standardized Beta	R^2 Chg.	Sig Chg.	B	Standardized Beta	R^2 Chg.	Sig Chg
Conflict	-3.930	-.093	.008	.550	-4.974	-.196	.074	.171
Total Words	.027	.620	.372	.001	.016	.291	.069	.179
Time Period	-1.280	-.072	.005	.546	-4.896	-.231	.040	.297
(Constant)	(3.814)				(13.802)			
	Mult R=.620 R^2=.384				Mult R=.427 R^2=.183			

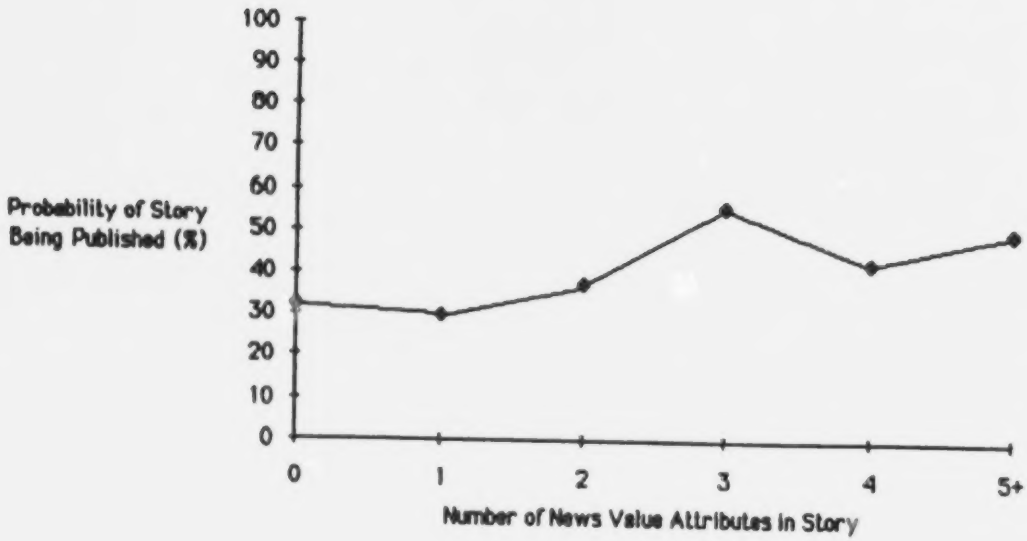

Figure 1. Probability of Story Being Published by News Value

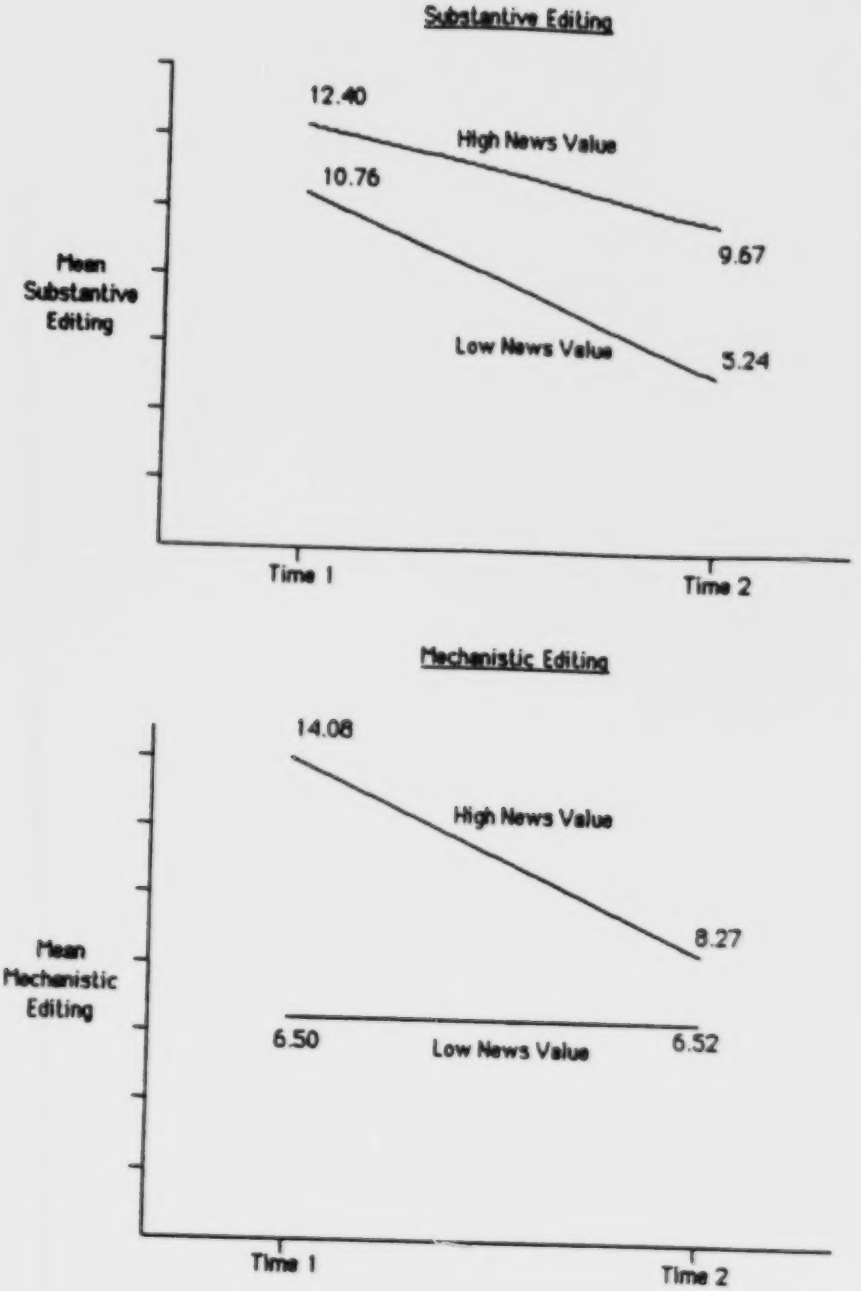

FIGURE 2. Mean Substantive and Mechanistic Editing by News Value and Time Period

APPENDIX 1. Operational Definitions of Variables in the Study

Timeliness

The length of time between the date on the release and the date it could appear in the newpapers. The last date the story could appear was defined as the day after which the story lost all value either because the event it referred to had already taken place or because the information was no longer relevant. Ranged from urgent to deferred stories.

Dollar Amount

A dollar amount mentioned in the news release that is integrally related to the main point or thrust of the story.

Conflict

A major presence in the news release of elements indicating disputes, controversies, crime or accident. A conflict could either be psychological or physical, present or anticipated. The presence of conflict, therefore, would be either directly related to the central topic or purpose of the article or would be highlighted by the writer through the style of writing s/he utilized within the story. Conflict that is a minor part of the story would be considered. "Fighting" against the unknown would not be regarded as conflict.

Number of Persons

The number of persons actually involved in the story/event itself; i.e., the largest number of persons overtly mentioned, excluding sources.

Prominence of Source

The prominence of the major sources of the story without which the story would not have been written. The first and second sources in the story were defined as the major sources and coded as well-known or not well-known according to the following criteria. Persons well-known were individuals with such fame, notoriety or accomplishment that they would be known to most readers of the particular newspaper. Persons not well-known were individuals in the news because of their particular accomplishments, activities, or position, but who were unlikely to be recognized by the typical reader.

Prominence of Source Affiliation

The prominence of the two major sources' affiliations was determined by whether a source served as a spokesperson for a well-known or not well-known group. Well-known groups included clubs, lodges, societies, fraternal organizations, committees, research or project teams and other governmental and nongovernmental groups with such fame, notoriety, or accomplishment that they would be known to most readers of the particular newspaper. Not

well-known groups included the same types of oragnizations, but referred to groups that were not likely to be known by the typical reader.

Uniqueness

Overt mention in the story of a first-time occurrence.

Mechanistic Changes

Beginning a new paragraph within an existing graph, or vice versa
Spelling changes
Letter insertions or deletions
Transposing letters
Setting letters in upper or lower case
Spelling out abbreviations, or vice versa
Spelling out a number, or vice versa
Creating or closing up spaces
word, phrase and sentence additions or deletions

Substantive Changes

Addition of conflict: If conflict (as defined above) had been added to the published version of a news release.

Addition of sources

Addition of other new information

Number of paragraphs eliminated from the story

Major Rewrite

Defined as having occurred when the majority of paragraphs in a story were changed/modified and transposed (changed in placement) or changed/modified.

A paragraph was defined as changed when the majority of sentences within the paragraph had undergone addition/deletion/transposit : of three or more words.